The University of New Mexico Chapter hosted the Zone 16 SPS meeting on Saturday, Nov. 1, 2014. The meeting was one of the larger meetings Zone 16 has seen in some time, with 37 students in attendance and with large contingents traveling to Albuquerque from NAU (Flagstaff), ASU (Phoenix), and NMTech (Socorro, NM). Meetings were held in P&A Room 190, which was filled to capacity. About 28 students stayed on through the dinner banquet, which was held at Church St. Café, and subsidized by the National Office.

The meeting began at 9 am on Saturday morning, with introductions, and a talk on the effects of Anderson localization in fiber optics by Prof. Arash Maffi. This was followed by a talk by Prof. Sally Seidel on her participation in the Atlas collaboration that jointly discovered the Higgs boson. In the break for Zone Business, the ASU chapter representatives stepped forward and volunteered to host the next Zone meeting on Valentine’s Day weekend 2015. Members of the NAU chapter then announced that they are interested in hosting the Zone meeting in the Fall of 2015, date to be arranged. The next event wasn’t a talk, but was a discussion of what it is like to pursue graduate studies, moderated by a panel of UNM physics graduate students. This was followed by a talk and lab tour on STORM imaging in biophysics by Prof. Keith Lidke. We walked across campus to lunch at the student union. After lunch, we returned for a lab tour of ultra-cold magneto-optical trapping of Cs atoms and single-atom imaging by Andy Ferdinand. This was followed by a talk about Quantum Information and Computing by Professor Carl Caves. The last event of the day was a physics demonstration contest hosted by Prof. David Dunlap in the big lecture room in Regener Hall. ASU tied with NAU for first place, but the tie-breaker favored ASU. After this, we reconvened in Old Town (downtown Albuquerque) for the farewell banquet at the Church St. Café.

UNM chapter officers Merrick Chalk, Greg Ottino, Christian Roberts, and Maria Benitez-Jones are to be commended for the work the put in to make this meeting a success. The chapter is grateful to Professors Arash Mafi, Sally Seidel, Keith Lidke, and Carl Caves, and PhD student Andy Ferdinand, for providing talks/lab tours, and John Gallegos for organizing the demonstrations for the demo-show. Thanks also to Satomi Suguchi, Andy Ferdinand, Katherine DeBlasio, Neil McFadden, and Jacek Osinski for serving on the graduate student panel.

Respectfully submitted,

Greg Ottino, Chapter Vice President
Merrick Chalk, Chapter President
Christian Roberts, Chapter Secretary
Meeting Flyer

SPS ZONE 16 MEETING

WHEN
SUNDAY NOVEMBER 1ST 2014
9AM-5PM

WHERE
UNIVERSITY OF NEW MEXICO
PHYSICS AND ASTRONOMY
BUILDING

WHO
PHYSICS STUDENTS FROM ARIZONA
AND NEW MEXICO... AND ANYONE ELSE WHO
WANTS TO COME!

WHAT
SOCIETY OF PHYSICS STUDENTS
ZONE 16 MEETING

EXTRA ON OCTOBER 31ST:
LATE NIGHT SHOWING OF A
SCARY MOVIE.
POP CORN WILL BE PROVIDED.

PHYSICS TALKS BY UNM PROFESSORS
GRADUATE STUDENT PANEL BY UNM
PHYSICS GRAD STUDENTS

ALBUQUERQUE, NEW MEXICO
Meeting Agenda

Saturday, November 1st, 2014

• 9:00 am: Introductory remarks
• 9:15 am: Presentation by Dr. Arash Mafi on quantum information and experimentation
• 9:45 am: Presentation by Dr. Sally Seidel on the Higgs Boson
• 10:15 am: Coffee break
• 10:30 am: Zone business
• 10:50 am: Grad Student Panel
• 11:30 am: Cancer cell imaging lab tour lead by Dr. Keith Lidke
• 12:30 pm: Lunch break
• 2:00 pm: Low temperature atom trapping lab tour lead by Dr. Francisco Becerra
• 3:00 pm: Quantum information lab tour lead by Dr. Carlton Caves
• 4:00 pm: UNM chapter demo show at Regner Hall
• 6:30 pm: Banquet
Photos

-Graduate Student Panel: Many undergraduates from the zone asked questions regarding graduate school and the graduate students were very open and honest about their experiences.
-Breaks between events:

SPS Zone 16 students with their skeptical look
SPS Zone 16 students with their skeptical look
SPS Zone 16 students getting to know each other

- Biophysics research talk and lab tour

*Dr. Keith Lidke giving a brief talk about his biophysics research*
Dr. Keith Lidke giving a tour of his biophysics lab
Dr. Keith Lidke giving a tour of his biophysics lab
Dr. Keith Lidke giving a tour of his biophysics lab
Dr. Keith Lidke giving a tour of his biophysics lab
UNM graduate student Andy Ferdinand giving a tour of an optics lab for low-temperature atom-trapping experiments (Bose-Einstein Condensation).
Several students broke off and ventured into the Albuquerque food landscape for lunch.

SPS Zone 16 students eating lunch at the UNM Student Union Building. They decided to go to Blake’s Lotaburger, a local burger franchise which was also featured on the popular show “Breaking Bad.”
Banquet:
For dinner, SPS students went to a famous restaurant located in the Old Town of Albuquerque called Church Street Cafe. This restaurant is a lovely representation of New Mexican culture as well as food and was a fun conclusion to the meeting.

*SPS students and Dr. David Dunlap engaging in good conversation*
SPS students making memories
SPS students making memories